```
<!--StartFragment-->RESULT 10
AAD46486/c
ID
     AAD46486 standard; DNA; 1481 BP.
XX
AC
     AAD46486;
XX
DT
     27-JAN-2003 (first entry)
XX
     Human amylin exon 3 mutant DNA.
DE
XX
KW
     Human; insulin secretion; hepatocyte nuclear factor; HNF-lalpha; amylin;
KW
     qlucokinase; mitochondrial DNA; type-2 diabetes; mutant; ds.
XX
os
     Homo sapiens.
OS
     Synthetic.
XX
FH
     Key
                     Location/Qualifiers
FT
     mutation
                     replace(254, A)
FT
                     /*taq=a
XX
     WO200272875-A1.
PN
XX
PD
     19-SEP-2002.
XX
PF
     14-MAR-2002; 2002WO-CN000158.
XX
PR
     14-MAR-2001; 2001US-0275891P.
XX
PA
     (UYCH-) UNIV CHINESE HONG KONG.
PA
     (WEST/) WEST C P.
XX
PΙ
                               Lee SC, Cockram CS, Chan JCN;
     Critchley JAJH,
                      Ng MCY,
XX
DR
     WPI; 2002-723370/78.
XX
PT.
     Microchip useful for detecting increased risk of, or predisposition to
PT
     Type-2 diabetes or screening genetic mutations in Chinese individuals,
PT
     comprises genes having mutations which indicate a predisposition for type
PT
     -2 diabetes.
XX
PS
     Disclosure; Page 87; 94pp; English.
XX
CC
     The present invention relates to methods and compositions for identifying
CC
     mutations and polymorphisms in mutant genes encoding the gene product
CC
     involved in insulin secretion such as hepatocyte nuclear factor (HNF)-
CC
     lalpha, glucokinase, amylin and mitochondrial DNA. The invention also
CC
     relates to a microchip which comprises a combination of two different
CC
     mutant nucleic acid sequences of a wild-type nucleic acid sequence that
CC
     encodes a protein involved in insulin secretion where the gene comprises
CC
     a mutation indicative of a predisposition for type-2 diabetes in a member
CC
     of a Chinese population. The microchips of the invention are useful for
CC
     detecting the increased risk of an individual with decreased insulin
CC
     secretory function to develop type 2 diabetes, screening for genetic
CC
     mutations in an individual diagnosed with type 2 diabetes, screening for
CC
     genetic mutations indicative of increased risk of an individual to
CC
     develop type 2 diabetes and screening for a genetic predisposition to
CC
     develop type 2 diabetes in an individual having a primary family member
CC
     that has been diagnosed with type 2 diabetes, where the individual is of
CC
     a Chinese population. The present sequence is human amylin exon 3 mutant
CC
     DNA which encodes a protein with S20G mutation
XX
     Sequence 1481 BP; 451 A; 267 C; 303 G; 460 T; 0 U; 0 Other;
  Query Match
                                   Score 18; DB 6; Length 1481;
                          100.0%;
 Best Local Similarity
                          100.0%;
                                   Pred. No. 40;
```

Matches 18; Conservative

0; Mismatches

0; Indels

0; Gaps

0;

Qy 1 CAAAGTTGTTGCCGGAAT 18

Db 266 CAAAGTTGTTGCCGGAAT 249

<!--EndFragment-->